# Montana State Library

# Industrial Horizons



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# Planning and Credit Corporation Bills Would Make Montana More Competitive

Among the 461 bills introduced in the House of Representatives of Montana's 35th legislative assembly are two which can aid the state's economic development, if passed.

### LOCAL PLANNING BOARDS

One of these, House Bill No. 413, would enable cities or cities and counties to form planning boards to plan for orderly growth and development in urban areas.

INDUSTRIAL HORIZONS has previously mentioned the need for this type of enabling legislation from the viewpoint of attracting industry as well as coping with the inevitable problems which arise when growth occurs. That such a law is needed is well demonstrated by numerous reports of why communities are unsuccessful in increasing income and employment opportunities through new business activity.

For example, an Indiana city reported that an industry which by-passed its city gave reasons that fit few of the usual notions of what industry likes and does not like. This particular industry did not like the shabbiness of the houses, the antiquated appearance of the business district, and above all the lack of planning programs.

And in contrast are the reports of cities which are successful both in nurturing local industry and attracting new endeavors, frequently because "the city had character" or "impressed the prospect by its progressive and orderly appearance." All of this is, of course, best exemplified by planning with an eye to the future—ten, twenty-five or even fifty years ahead.

Future Problems

Montana is fortunate that it has few communities with serious disadvantages in these respects. Still, the problem is increasing in seriousness as our towns become older and as they grow in size. There is therefore no room for complacency or smugness, and now before it becomes critical is the time to tackle the problem.

The planning boards envisioned under House Bill 413 would act in an advisory capacity to city and county governments with the exception that responsibility for platting and zoning control can be delegated to the planning board by the local governing bodies creating the board. Such delegated authority would not, however, interfere with existing land uses or present business operations.

All in all, the bill, if passed, should do much to encourage further economic development within the state. Most as-

### DEVELOPMENT CREDIT CORPORATIONS

House Bill No. 421, providing for the establishment and operation of business development corporations would, if enacted and implemented, bring to Montana a supplemental type of financing organization now successfully used in New England and Eastern states.

Business or industrial development credit corporations, as they are most frequently called, provide a means whereby long-term or marginal loans may be made to qualified businesses when such funds are not available from existing lending institutions. This type of organization would be especially meaningful in Montana, where local industry is usually small in size and frequently lacks the capital to get started and to expand operations, even though profit records and credit experience may be favorable.

The principal reasons that such businesses are unable to secure expansion capital are: First, that savings in today's economy are highly institutionalized. That is, they are in the main going into bank deposits, life insurance and trust funds, which pools ordinarily seek lowrisk investments. Secondly, the level of income taxes, complicated by depreciation restrictions, has made it increasingly difficult to set aside sufficient reserves out of earnings to pay for new equipment and raw material supplies when good opportunities for expansion arise.

Profit-Making Objective

Thus, the credit corporation is not a "bail-out device," but rather a financial enterprise operated for profit on sound business principle. Only those businesses determined to have growth potential and needs for intermediate and long-term credit not available elsewhere would find their loans approved by the board of directors and loan committees provided for in the bill.

No public monies would be involved. The corporation would be privately owned, directed and financed with all profits accruing to members and stockholders. Operating under existing cor-

suredly it will be of considerable social consequence by providing a means whereby the people of Montana can make their cities what they wish them to be.

poration laws, it would be State-chartered and would obtain its loan funds from sale of capital stock and loans to the corporation from banks, insurance companies and other financial institutions on a voluntary basis.

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One of the advantages of the credit corporation is the spreading and diversification of risks, both among the financial institutions participating in the corporation and among the various sources of funds which may be available to an expanding business. For example, a part of an expansion loan could be taken by a community development group and a part taken by the development credit corporation, the latter probably holding a first mortgage on the collateral with the local development group carrying the higher risk. Similarly, the U. S. Small Business Administration can participate with industrial development credit corporations.

The Planning Board is encouraged to see that consideration is being given to House Bills 413 and 421, for it is concrete evidence that concern for the state's economic development is widespread and more than "lip service." With this type of progressive thinking and the numerous action programs currently being implemented in the state, there is good reason for optimism as we look to the future. It does seem that Montana is on the move!

### Engineers Hear Waldorf

Officials of Waldorf Paper Products Company presented a summary of plant operations of the pulp mill they are building in Missoula, at a joint meeting in Helena of the Montana Society of Engineers, Helena branch of the American Society of Civil Engineers and American Institute of Electrical Engineers, on January 17.

Under the leadership of Nels H. Sandberg, executive vice president of Waldorf, the group emphasized the facilities being installed to eliminate water pollution and unpleasant odors from smoke exhausts.

Also present at the public meeting were members of the 35th Montana Legislative Session, and representatives of the State Fish and Game Department and the State Board of Health. The meeting was chaired by C. W. Brinck, secretary of the State Water Pollution Council.

## State's Research Groups Aid Development

The Planning Board has not undertaken any basic research programs for two reasons. First, financial and staff limitations preclude intensive research efforts. Secondly, the state already has several research organizations capable of aiding economic development, both through compiling basic data, and through undertaking specific projects for Montana business on a contract basis. INDUSTRIAL HORIZONS here reviews the work of these institutions.

They have helped the state's economic and social development in many ways, and the State Planning Board is appreciative of their aid to its program.

### MSU Business Bureau Does Economic Research

### By Edward Chambers, Associate Director

The record of recent decades has illustrated the usefulness to industry and government of basic economic research and market analysis. The primary function of the Bureau of Business and Economic Research associated with the School of Business Administration at Montana State University is to promote and facilitate research in these fields. Among the areas in which the work of the Bureau has been concentrated is analysis of current business conditions (including forecasting) in Montana as well as the nation. The results of much of this work are found in the Bureau's



Business and Education Building at MSU, home of Bureau of Business and Economic Research.

monthly publication, Montana Business. This presents at regular intervals a summary of business conditions and anticipations, as well as a series of business indexes indicative of the situation in the state. The program of the Bureau has also included projects relating to taxation, to natural resources, and to the development of the states' economy. Examples are an assessment of the economic base of the state, an analysis of the assets and liabilities of Montana's commercial banks, and an examination of phosphorus production. In addition to the work of the Bureau, individual members of the faculty have engaged in specific economic studies on such subjects as potential cement consumption and regional variations in furniture and home furnishing expenditures.

The Bureau of Business and Economic Research is planning to undertake a number of studies which will add significantly to the basic economic and marketing data available on the state and its political subdivisions. Some of these will lead to the development of county income patterns, to an intensive analysis of the state's population and the composition of its labor force, and to the analysis of the flow of goods both in an east-west and north-south direction into and through the state.

### MINES BUREAU AIDS STATE

Research on mineral and water resources is provided at Montana Bureau of Mines and Geology, the research arm of the School of Mines in Butte. Professor W. S. March, Jr., is Associate Director.

Undertaking specific research projects in response to the needs of the state, the Bureau provides many services to Montana industry (see story in INDUSTRIAL HORIZONS for September, 1956).

Recent publications available from the Bureau have included a survey of iron ore deposits, a list of known mining enterprises, a study describing a new geochemical prospecting method, and a study of sodium sulphate deposits in Montana

One project recently concluded was a study of lightweight aggregates in the Great Falls area, a cooperative venture with the Great Falls Chamber of Commerce. The study definitely located deposits of scoria and shale near Great Falls, and demonstrated their economic feasibility for use in building blocks. Several Great Falls firms are reported to be investigating the possibility of using these aggregates in concrete products.

### BUREAU STUDY AIDED STATE OFFICE

A concrete example of research by the Bureau of Business and Economic Research is the study. "The Economy of Montana," written in 1951 by Harold J. Hoflich, then Director of the Bureau, and Mrs. Maxine Johnson, Research

This study was financed by the State Unemployment Compensation Commission as a basis for evaluating unemployment insurance in Montana. As Dr. Hoflich wrote in his preface, "The purpose was to furnish a hasis for etermining the actuarial soundness of the unemployment insurance structure over the next decade. An actuarially sound structure is one which embodies a proper relationship among benefit disbursements, payroll tax rates, and reserves. It was clear that a description and analysis of the economic structure of Montana was an essential part of the study. This is because the probable future level of unemployment insurance costs depends in large part upon the nature of the state's economy."

This study aided in adjusting the benefit and contribution rates employers must pay under the Unemployment Compensation Act.

Another interesting and important research institution is the U. S. Public Health Service lab at Hamilton, at which Rocky Mountain Spotted Fever vaccine was discovered in 1925. Lab is now heing used for work on virus causing "intestinal flu."

Right: Forestry Bldg, at MSU, where much of research on utilization of wood products is conducted.



### RESEARCH AT MSU

Many other projects of interest to Montana businessmen are being conducted at Montana State University.

For instance, the Forestry and Conservation Experiment Station of the School of Forestry has been active in investigations of forest, wildlife, range and watershed management; wood utilization and forest engineering. And the Physics Department has recently added an electron-accelerator to its research facilities. The Home Economics Department has made studies of the losses in nutritional value and flavor in precooked, pre-mixed and frozen foods. Other projects have dealt with tree and plant diseases, geology of commercial minerals, electrolytic oxidations and reductions, pharmaceuticals, food cost control and time and motion studies.

Likely to be of increasing use to industry in the future are the statistics laboratory of the Mathematics Department, the language laboratory of the Department of English, and leader-behavorial research in the School of Education. Business leaders throughout the country have come to recognize the need for greater knowledge and skills in these fields.

## MSC RESEARCH FOUNDATION IMPORTANT TO ECONOMIC GROWTH

Of great potential to Montana's industrial future is the Endowment and Research Foundation at Montana State College, a private corporation founded in 1947 to eoordinate contract research at MSC. The foundation handled projects totaling \$147,000 during 1956.

December 14, 1956, in a program to acquaint Montana industry with research at MSC, the Foundation sponsored a campus tour for representatives of twelve Montana industries. Typical of the research projects viewed by the group, all sponsored by private industry, included one to synthesize battery-active manganese dioxide suitable for use as a component of dry cells. Manganous sulfate is being reacted with caustic soda and chlorine. Manganese is an important product of Montana mines.

Another project is trying to find a method of upgrading and removing sulfur and nitrogen from shale oil, which is found in abundance throughout the state. Shale oil is a potential supplement to petroleum. A project to convert trona and soda ash into sodium carbonate with chemical characteristics more suitable for industrial use than at present was also inspected, as was a process to convert sulfur dioxide (contained in fumes from nonferrous metal smelting) to elemental sulfur, a product of expanding uses in such industries as paper. The sulfur dioxide is being reacted with a reducing agent, either methane from natural gas or carbon from char.

### Electronics Research

The tour included a visit to the Electronics Research Laboratory, which is operating with an annual expenditure of around \$20,000. This can be expanded to \$80,000 during 1957 provided qualified staff and needed laboratory facilities can be obtained, according to Dean Leon H. Johnson of the Graduate School, Executive Director of the Foundation, Such an expenditure would make five to ten graduate fellowships available. Primary research project of the laboratory is developing and testing of a new communications system (see accompanying cut).

This project is conducted in cooperation with Stanford Research Institute, and is directed by Associate Professor Donald K. Weaver, Jr. A second project, also sponsored on a sub-contract basis by SRI, concerns techniques for single-sideband modulation.

Other projects viewed by the touring group concerned plant and veterinary research, both important to Montana as an agricultural state, and the Radio and TV Film Center, which produces tapes and films for industrial and commercial use.

It has been said that a first step in industrial development, with the dependence of modern industry on technical progress, is creation of consulting services for solution of technical problems. This fact is especially true in the fields of chemicals, petroleum, electronics and paper—fields in which Montana's potential is high.

Montana has such a service in the form of the Research Foundation at MSC for contract research. As its services are expanded and become better known, its contribution to economic development will become even greater.

### Research at MSC

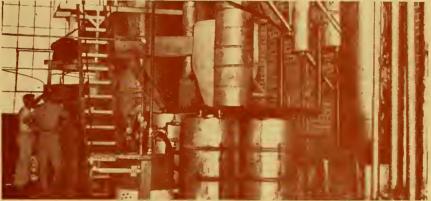
Montana State College specializes in engineering and agricultural research.

For more than fifty years, the Montana Experiment Station, which includes seven branch stations throughout the state as well as the Veterinary Research Laboratory and the Montana Wool Laboratory, has been helping rural citizens solve their problems.

Typical of projects in recent years was development of the wind reel, a product now in commercial production. Attached to the combine, the machine picks up lodged and down grain that would be lost otherwise. Another project was improvement of procedures in freezing and canning, so as to retain food nutrients.

The Engineering Experiment Station, whose resources are available to Montana industries for solution of technical problems, has made many contributions to the state's industrial development.

One of the most recent is perfection of a process for making high-grade char from coal. Over a period of several years, PD & P Processing Corp. of Spokane has given the Experiment Station about \$100,000 to develop a better way to manufacture char and creosote from coal. A ten-ton-per-day pilot plant was constructed, (see accompanying pic-



Pilot plant at MSC Engineering Experiment Station at which process for manufacturing char, tar and creosote from coal was developed. Process will be used in new Koal-Krudes plant at Red Lodge.

ture). Koal-Krudes, Inc., an affiliate of PD & P, is now building a plant at Red Lodge utilizing this process. The 1955 Legislature also appropriated \$40,000 for the project for research on industrial uses of coal and lignite. The pilot plant is being used now to prepare samples of Red Lodge char for evaluation by potential customers, and will be used in the future to test coal for this process from Montana fields other than Red Lodge.

This research project is only one example of what MSC can do for Montana industry. The school administration is anxious to have industry utilize the facilities at the College. Not only does the state's economic development benefit but students are aided in their education. Contract research provides them with practical experience in the problems they will face upon graduation.



Communications research at MSC Electronics Research Lah, a part of the Research Foundation.

### PLYWOOD MILL AIDS LOCAL ECONOMY

Montana's only plywood mill, Polson Plywood Company, is a boon to the economy of Polson, according to Mrs. Dorris Stalker, secretary of the Polson Chamber of Commerce.

The mill hires 120 full-time, year-round employees, and has a monthly payroll of \$40,000. This has a big impact on Polson, with a population of 2,800. Current

production is seven cars of plywood a week, plus truck hauls equivalent to two more cars.

Polson Plywood is a relatively new Montana enterprise: it shipped its first car of veneer in September, 1954. It is a Montana company, too. A majority of the stock is held in Western Montana. President is Will Tiddy of Polson, and George Kern is vice president and sales manager. The firm is capitalized at \$400,-000, and has assets of \$700,000.

Using several different species-fir, larch, spruce. Ponderosa pine and cottonwood—the firm manufactures interior sheeting of all thicknesses. Production of sanded and specialty panels for interior decorating purposes is contemplated for the future. In order to utilize Montana larch, a special chemical was developed to make the face and back of the panels resin-sealed, and therefore resistant to moisture and water. Larch is slow growing, and consequently more tight-ringed and heavier than the Douglas fir conventionally used in plywood manufacture. Panels faced with this larch lend themselves well to sanding and finishing.

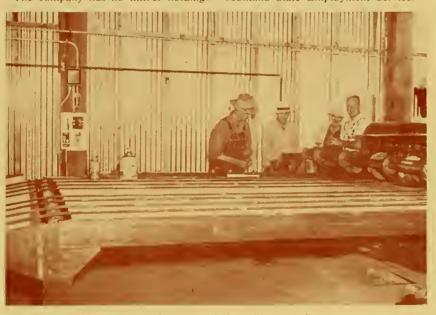
The company has no timber holdings

of its own; most of its logs come from the Swan area east of the Mission range. However, the company does operate a small sawmill in connection with the plywood mill.

The mill's plywood has a national distribution. Although one fifth of its output is reserved for Montana wholesalers and jobbers, the remainer through a Seattle thest quantitation. Since the mill is the furthest East of the Pacific Northwest plywood milk, it paomic development and 35 of the state's enjoys a preferential freight Africe to leading industries, along with the Planning Roard joined together in this effort est Coast carloads.

The mill was added in site focation.

timber procurement and market prob-lems by D. P. Edgell, general manager of properties and industrial development for Northern Pacific Railway. Much of the timber for the mill comes from NP land, and the mill site itself is on NP property. Employment problems have been worked out with Chauncey Biffle. Local Manager of the Polson Office of Montana State Employment Service.



Plywood manufacture at Polson Plywood Company.

### Commerce and Industry Now Available

Publication of the Montana issue of "Commerce and Industry" was announced early in January by F. O. Schroeder, publisher.

With a national circulation of 5,000, the magazine is a quarterly guide to plant site selection for manufacturers, engineers, investment bankers and industrial realtors. This issue contains a comprehensive survey of Montana's industrial picture including separate chapters on all phases of the economy.

velopment program is that 21 local economic development and 35 of the state's Midwestern and Eastern markets Firms ning Board, joined together in this effort in the East save about SH Ger Cross EsiDaulicize the state by subscribing for West Coast carloads.

The null was abled in site together. state educational institutions and State offices. Pictures were supplied by Montana business firms, State Fish and Game Department, State Advertising office, Montana Chamber of Commerce and local chambers of commerce.

> Copies are available from the Planning Board.

### Interesting Publications . . .

Farm Labor Report—1956 (Helena: Montana State Employment Service, 1957). Comprehensive survey of this vital part of our labor force. Emphasizes the seasonal nature of much of our agricultural activities, and the importance of this fact for our economy.

Pulpwood Resources of Mineral Connty, Montana (Superior: Mineral County Chamber of Commerce, 1956). A model of an industrial survey for a specific industry (pulp and paper). Contains factual chapters, including tables, on sawtimber cut in the Superior area; water flow data from three gauging stations on the Clark Fork River, and climate,

Parking Guide for Cities (Washington: U. S. Bureau of Public Roads. 1956; 55c). A useful handbook for Montanans interested in city planning. Tells procedures for conducting surveys of parking needs, and gives various solutions for the parking problem most central business districts are experiencing. In-cludes advice on land acquisition; public financing; use of meters and of municipally-owned garages.

### MONTANA STATE PLANNING BOARD

Sam Mitchell Building

Helena, Montana

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